## What is claimed is:

1. An epoxy acrylate of formula (III)

$$Q = \begin{bmatrix} OM & OM \\ | & | \\ O - A - O - CH_2 - CH - CH_2 O - T - OCH_2 CH - CH_2 \end{bmatrix} L$$
 (III)

wherein

Q is hydrogen or a group of formula

OH CH - 
$$R_2$$
  
| | | | - CH<sub>2</sub> - CH - CH<sub>2</sub> - OOC - C -  $R_1$ 

O OM 
$$/$$
 \ | Or CH<sub>2</sub> - CH - CH<sub>2</sub>O - T - OCH<sub>2</sub>CH - CH<sub>2</sub> -

 $R_1$  is -H or -CH<sub>3</sub>,  $R_2$  -H, -CH<sub>3</sub> or phenyl

T is the radical of an aromatic bifunctional compound, and

M is each independently hydrogen or a group of formula

OH 
$$CH - R_2$$
 , in which  $-CH_2 - CH - CH_2 - OOC - C - R_1$ 

R<sub>1</sub> and R<sub>2</sub> are as defined above,

- A is the radical of an aromatic bifunctional compound,
- n is an integer from 0 to 300, and
- L is a group of formula

or 
$$-O-A-OM$$
,

with the proviso that in formula III not all radicals M may be simultaneously hydrogen or a group of formula

but at least 10 mol %, preferably 20-100 mol %, of the radicals M that are not present in the end groups Q and L denote a group of the above formula

OH CH - 
$$R_2$$
  
 $\parallel$   
- CH<sub>2</sub> - CH - CH<sub>2</sub> - OOC - C -  $R_1$ 

wherein R<sub>1</sub> and R<sub>2</sub> are as defined above.

- 2. An epoxy acrylate of formula III according to claim 1, wherein  $R_1$  is hydrogen or methyl and  $R_2$  is hydrogen, methyl or phenyl.
- 3. An epoxy acrylate of formula III according to claim 1, wherein n is an integer from 0 to 50 and A and T are each independently of the other a linking group of formula

$$\begin{array}{c} \begin{array}{c} R_4 \\ C \\ R_5 \end{array}$$

wherein  $R_4$  and  $R_5$  are each independently of the other -H or  $C_1$ - $C_4$ alkyl and the phenyl radicals of said linking group are unsubstituted or bromine-substituted.

4. A process for the preparation of an epoxy acylate of formula (III) according to claim 1, which comprises reacting a postglycidylated epoxy resin of formula II

$$E = \begin{bmatrix} OG & OG \\ & & \\ O-A-O-CH_2-CH-CH_2O-T-OCH_2CH-CH_2 \end{bmatrix} F \qquad (II),$$

wherein

E is hydrogen or a group of formula

O OG 
$$\mid$$
 Or CH<sub>2</sub> - CH - CH<sub>2</sub>O - T - OCH<sub>2</sub>CH - CH<sub>2</sub> -

F represents the groups of formula - O - A - OG or

OG O and O - O - A - O - 
$$CH_2$$
 -  $CH$  -  $CH_2O$  -  $T$  -  $OCH_2CH$  -  $CH_2$ 

G is -H or the radical 
$$/$$
  $/$  ,  $- CH_2 - CH - CH_2$ 

with the proviso that, in formula II, at least 10 mol % of the radicals G that are not present in the end groups E and F represent the group of formula

A, T, and n are as defined in claim 1,

with an ethylenically unsaturated monocarboxylic acid in the presence of a catalyst and a polymerisation inhibitor, at elevated temperature.

5. A carboxyl group-containing epoxy acrylate of formula IV

$$X = \begin{bmatrix} OW_1 & OW_1 \\ | & | \\ O-A-O-CH_2-CH-CH_2O-T-OCH_2CH-CH_2 \end{bmatrix} Y$$
 (IV)

wherein

X is hydrogen or a group of formula

O 
$$\|$$
- C - R<sub>3</sub> - COOH

OW<sub>2</sub> R<sub>1</sub> or
- CH<sub>2</sub> - CH - CH<sub>2</sub>OOC - C = CH - R<sub>2</sub>

OW<sub>1</sub> OW<sub>2</sub> R<sub>1</sub> |
- CH<sub>2</sub> - CH - CH<sub>2</sub>O - T - OCH<sub>2</sub>CH - CH<sub>2</sub>OOC - C = CH - R<sub>3</sub>

R<sub>3</sub> is the radical of a cyclic anhydride of a polycarboxylic acid after removal of the anhydride radical,

W<sub>1</sub> is hydrogen or a group of formula

or
$$-C - R_3 - COOH$$

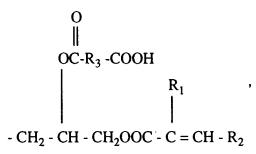
$$OW_2 \qquad R_1$$

$$-CH_2 - CH - CH_2OOC - C = CH - R_2$$

$$W_2$$
 is -H or the group  $\begin{vmatrix} O \\ \parallel \\ -C-R_3-COOH \end{vmatrix}$ , and

Y is the group of formula  $-O-A-O-W_1$  or

wherein the symbols A, T,  $R_1$ ,  $R_2$ ,  $R_3$  and n are as defined in claim 1, with the proviso that, in formula IV, at least 10 mol % of radicals  $W_1$  that are not in the end groups X and Y are a group of formula



wherein  $R_1$  and  $R_2$  are as defined in claim 1 and  $R_3$  is as defined in claim 5.



- 6. A process for the preparation of a carboxyl group containing expoxy acrylate of formula IV as claimed in claim 5, which comprises reacting an epoxy acrylate of formula III as claimed in claim 1 with a cyclic anhydride of a polycarboxylic acid, in the absence or presence of a catalyst and of a polymerisation inhibitor, at elevated temperature.
- 7. A method for preparing photoresist formulations comprising the use of an epoxy acrylate of formula III as claimed in claim 1 as acrylate component.
- 8. A method for preparing photoresist formulations comprising the use of a carboxyl group-containing epoxy acrylate of formula IV as claimed in claim 5 as acrylate component.